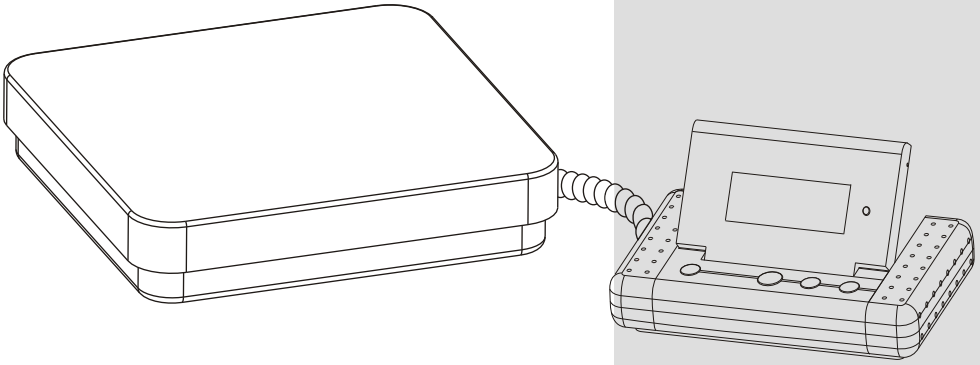
SVI SERIES

PROFESSIONAL PRECISION INDUSTRIAL SCALE



Instruction Manual

Manual de Instrucciones

Bedienungshandbuch

Manuel d'utilisation

使用說明書

- SVI-10A
- SVI-20B
- SVI-50C
- SVI-100E
- SVI-200F

ACCULAB

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Introduction

Thank you for purchasing an **Acculab SVI Series Professional Scale.** Please read all of the operating instructions to ensure optimum performance. The unit is pre-calibrated at the factory and is ready to use with the supplied AC adapter.

Important Information

- Allow 15 to 20 minute warm up time before starting calibration routine in order to give internal components sufficient time to stabilize.
- Avoid lengthy exposure to extreme temperatures. Your scale works best when operated within the temperature range listed within the specifications.
- Place scale platform on solid, level surface.
- Keep environment clean, avoid dust, dirt & liquids from getting inside of scale platform and indicator, which can adversely effect and damage the scale.
- Vibrations, air currents and electromagnetic interference may effect the performance of the scale.
- Although the scale is very durable, please prevent excessive overloading and dropping objects on to the platform that may cause permanent damage to the weight cells.

Installation & Operating Instructions

Remove and inspect all contents from package. If you will be mounting the indicator with the provided bracket we suggest that you install this first (note: please do not remove cable from the base or indicator).

AC Adapter:

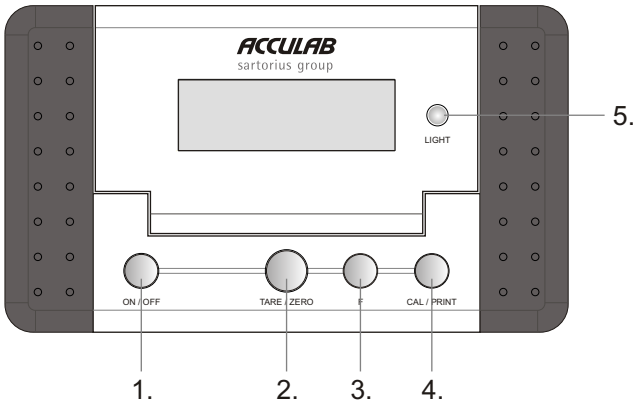
After setting-up the base and the indicator within the desired location plug (included) AC adapter into main outlet (AC adapter voltage dependent upon local region / only use AC adapter provided with scale. Use of another type of adapter may permanently damage the scale and void warranty). Turn unit on by pressing the “ON/OFF” key. Self diagnostic test will automatically run displaying “8.8.8.8.” and releasing to weigh mode with selected unit (Example: “0.000kg”). Scale is ready for use. For additional features and operation please see “Key Functions / Description” and “Features”.

Battery Operation:

One 9 volt Alkaline or 9 volt NICAD rechargeable battery is required (not included with scale). To install battery, open battery cover located on the back of the indicator. Connect battery to the leads accordingly and install within holder and replace cover. It is recommended to remove battery when scale is not in use for extended periods. Also replace low or dead batteries.

Note: Back-lit display is “off” unless activated with “Light” key.

Key Functions / Description:



1. ON/OFF:

Press to turn scale ON or OFF.

2. ZERO/TARE:

Pushing ZERO/TARE key "zero's" display, pushing and holding ZERO/TARE key for more than 3 seconds accesses application menu.

3. "F" Key:

Function key for applications (Unit toggling, Counting & Totaling) and menu scrolling.

4. CAL/PRINT:

Press and "hold" CAL/PRINT key (for approximately 3 seconds) and scale will automatically enter calibration mode (displaying one of three weight values). Press and "release" CAL/PRINT key to print displayed information when utilizing RS-232 interface.

5. LIGHT :

Turns on backlight during battery operation (Auto Off: One Minute).

Calibration:

1. **Weight Calibration:** with the pan cleared and zero stability indicated in display, press and hold the "CAL/PRINT" key for more than 3 seconds to enter the calibration mode.
2. Depending upon your Model a default weight will be displayed in "kg" (note: you have 3 weight values to choose from)
3. In order to select additional cal-weight options, press and release the "F" key and the display will toggle between selectable values based on model. (Please see Product Specifications)
4. After selection of the desired cal-weight option, press the "CAL/PRINT" key and release to confirm, and the value will flash to begin calibration.
5. Place corresponding weight onto center of pan. If weight is accepted, the display will stop flashing and show "selected kg" value in display.

6. Please remove weight and zero scale.
7. Place cal-weight back on to pan and the result should be within +/- 1d.
8. Calibration complete.

Calibration Notes:

- The actual calibration weight needs to be within +/- 5% of the selected weight.
- If the scale is not zeroed before calibration, error "E-01" will be displayed.
- If calibration weight is positively "above" the 5% tolerance, error "E-02" will be displayed.
- If calibration weight is negatively "below" the 5% tolerance, error "E-03" will be displayed.
- Always allow a minimum of thirty seconds for the scale to stabilize. During prolong periods of use repeat calibration procedure at regular intervals for optimum accuracy.

Note: Please do not open or attempt to "internally" calibrate the scale. This will void warranty and may damage scale .

Application Programs:

Weight Units: (Default Application)

1. To select "units" press and hold "TARE/ZERO" key for more than 3 seconds to access application menu ("UNIT" will be displayed).
2. With "F" key you can scroll through the options (UNIT, COUNT, & TOTAL).
3. Select "UNIT" by pressing "CAL/PRINT" key (default unit "grams" or "kg" will be displayed).
4. With the "F" key you can scroll through weigh unit options (g, lbs, ozt & kg) depending upon model.
5. Select desired weigh unit by pressing "CAL/PRINT" (selected option will be displayed and balance will return to weighing mode).
6. Pressing the "F" key will enable you to toggle between selected weight unit and default "kg".
7. Selected weigh unit will be retained in memory after balance is turned off.

Counting:

1. To select "Counting" application press and hold "TARE/ZERO" key for more than 3 seconds to access application menu ("UNIT" will be displayed).
2. With "F" key you can scroll through the options (UNIT, COUNT, & TOTAL).
3. Select "COUNT" by pressing the "CAL/PRINT" key .
4. Display will automatically exit menu and return to weighing mode, with a "CNT" displayed in the left hand side of the display & the selected weigh unit displayed (signifying to the user that they are in an application mode).
5. Place empty container or box on scale and tare. (If applicable)
6. Press "F" key to display reference sample/default "1" (quickly pressing and releasing the "F" key will advance the number 1,2,3, etc... / Holding the "F" key will advance the numbers faster 10, 20, 50, up to 99).
7. After selection of the desired number, place corresponding samples on scale and press "CAL/PRINT" to confirm (display will show "pcs" with corresponding piece count).
8. Pressing the "F" key will allow the user to toggle between gross weight, net weight, average piece weight & pcs.

9. To exit “Counting” press and hold “TARE/ZERO” key for more than 3 seconds to access application menu and select “UNIT” (default setting).

Totaling:

1. To select the application “Totaling” press and hold “TARE/ZERO” key for more than 3 seconds to access application menu.
2. With the “F” key you can scroll through the menu options (UNIT, COUNT, & TOTAL).
3. Select “TOTAL” by pressing the “CAL/PRINT” Key.
4. Display will automatically return to weighing mode with “TTL” displayed (signifying to the end user that they are in application mode).
5. Place1st object on scale and press “F” (value is stored) / remove object and display will return to zero.
6. Place 2nd object on scale and press “F” (value is added to 1st) and the “TTL” symbol will flash (indicating total weight stored) / remove object and display will return to zero (“TTL” stops flashing).
7. Place 3rd object on scale and press “F” (value will be added and “TTL” will flash) / remove object and display will return to zero (”TTL” stops flashing) process can be repeated up to 99 times.
8. Holding down the “F” key for 3 seconds will clear all memory.
9. To exit “Totaling”, press and hold “TARE/ZERO” Key for more than 3 seconds to access application menu and select “Unit” (default setting).

Features:

Digital Calibration:

Allows for convenient user calibration from the keypad with three selectable weight options.

Power Up Test:

When the unit is initially turned on all segments of the display will appear. The segments will be displayed for approx. 3 seconds. After self-test scale will return to zero.

Overload:

When a load or force is applied to the scale platform that exceeds the unit’s capacity “H” will appear in the display indicating an overload has occurred.

Auto Off:

During battery operation (in order to conserve battery consumption) the scale will automatically turn off after approximately 4 minutes of inactivity / default setting. (Please see “Menu” options for additional settings).

RS-232:

Standard feature included with scale. (Please see Interface Description)

Care and Maintenance:

- Avoid lengthy exposure to extreme heat or cold. Please allow the scale to acclimate to room temperature for at least 15 to 20 minutes if exposed to extreme temperatures. (Please see Product Specifications)
- Keep product clean. Remove pan from base and clean accordingly. Do not “wash down” scale or indicator with water or cleaning liquids.
- Please use supplied packaging when transporting scale.
- Remember to remove battery when not in use.

Menu Settings:

Set up Menu / Configuring Scale

(Factory set parameters are marked “0”.)

1. Turn off scale.
2. Turn on while holding the ZERO/TARE key.
3. Page or level value “1” will be displayed.
4. To navigate within a menu level press “F”, when you reach the last menu item, the first item is shown again.
5. To select the next line or level within a group press and release “CAL/PRINT” key.
6. To return to the previous level (or page) press “ZERO/TARE” Key.
7. To confirm selected parameters press and hold the “CAL/PRINT” key for more than 3 seconds.
8. “0” indicates the selected menu setting.
9. To store selected codes and exit menu press and hold “ZERO/TARE” key for 3 seconds or until display returns to weigh mode.

Scale Operating Menu:

Unit Toggling
141 Unlocked “0”
142 Locked

Auto Zero
151 On “0”
152 Off

Calibration Setting
171 Calibration on “0”
172 Calibration off

Baud Rate
211 1200 Baud “0”
212 2400 Baud
213 4800 Baud
214 9600 Baud

Parity
221 Mark
222 Space
223 Odd “0”
224 Even

No. Of Stop Bits
231 1 “0”
232 2

Manual / Auto Print Mode
311 Manual without stability
312 Manual after stability
313 Auto without stability
314 Auto at stability

Disable Keys
(Disables All Keys Except for “ZERO/TARE” Key)
411 On
412 Off “0”

Battery ON/OFF Mode
511 Turns off after 4 minutes of in-activity “0”
512 Always on
513 Turns off after 10 minutes of in-activity

Factory Settings
911 Reset

Interface Description

- **Type of Interface:** *Serial*
- **Operating Mode:** *Full Duplex*
- **Transmission Rates:** *1200, 2400, 4200, 9600 Baud*
- **Parity:** *Mark, Space, Odd, Even*
- **Data Output Format:** *16 Characters*
- **Factory settings:** *Please See Scale Operating Menu*
- **Pin Assignment:** *Pin2: Tx, Pin3: Rx, Pin5: grnd*

Commands	**ASCII**	**HEX**
Print	"p" CR LF	70 0D 0A
Zero / Tare	"t" CR LF	74 0D 0A
Change Unit	"u" CR LF	75 0D 0A
"F" Key	"f" CR LF	66 0D 0A
"Unit" Mode	"a" CR LF	61 0D 0A
"Counting" Mode	"b" CR LF	62 0D 0A
"Totaling" Mode	"c" CR LF	63 0D 0A
"Calibration" Mode	"D" CR LF	64 0D 0A

Counting Mode Commands

Set Number of Pieces	"m050" CR LF	6D 30 35 30 0D 0A (set 50 pcs)
Net Weight	"b1" CR LF	62 31 0D 0A
Gross Weight	"b2" CR LF	62 32 0D 0A
Average Weight	"b3" CR LF	62 33 0D 0A
Pcs	"b4" CR LF	62 34 0D 0A

Totaling Mode Commands

Clear Memory	"c1" CR LF	63 31 0D 0A

Output Format

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	-	*	D	D	D	D	D	D	D	D	*	U	U	U	CR	LF

D: Digit or Letter U: Unit CR: Return LF: Line Feed * : Space

Product Specifications:

Model No.	SVI-10A	SVI-20B	SVI-50C	SVI-100E	SVI-200F
Capacity	10 kg, 10,000 g, 22 lbs, 321 ozt	20 kg, 20,000 g, 44 lbs, 643 ozt	50 kg, 110 lbs 1607 ozt	100 kg, 220 lbs, 3215 ozt	200 kg, 440 lbs, 6430 ozt
Readability	1 g, 0.001 kg, 0.002 lbs, 0.05 ozt	2 g, 0.002 kg, 0.005 lbs, 0.1 ozt	0.005 kg, 0.01 lbs, 0.2 ozt	0.02 kg, 0.05 lbs 0.5 ozt	0.05 kg, 0.1 lbs 1 ozt
Weighing Modes	grams, kilograms, pounds, troy ounces		kilograms, pounds, troy ounces		
Tare Range	To capacity by subtraction				
Calibration	2 kg, 5 kg, 10 kg	5 kg, 10 kg, 20 kg		5 kg, 20 kg, 50 kg	
Maximum Overload	200 %				
Overload Indication	“H” reading on LCD with audio tone				
Underload Indication	Displays negative readings				
Auto Off	Menu selectable: 4 or 10 minutes no activity / Always on				
Operating Temperature	50 - 104 degrees F (10 - 40 degrees C)				
Low Battery Indication	“LO” on LCD with audio tone				
Power Requirements	Included AC adapter or optional 9 volt battery				
Pan Type	Stainless steel				
Pan Size	308 mm x 308 mm (12.4” x 12.4” inches)			403 mm x 520 mm (15.9” x 20.5” inches)	

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If you have any questions please contact your local Acculab supplier, visit our website **www.acculab.com** or contact:

Si tiene alguna duda, póngase en contacto con su proveedor local de Acculab, visite nuestra página web **www.acculab.com** o póngase en contacto con:

Wenden Sie sich bei Fragen an Ihren Aculab-Lieferanten vor Ort, besuchen Sie unsere Internetseite **www.acculab.com** oder wenden Sie sich an:

Si vous avez des questions, veuillez contacter votre fournisseur local Acculab, visiter notre site web **www.acculab.com** ou vous adresser à:

若您有任何問題，請聯絡當地的 Acculab 供應商，或造訪我們的網站 **www.acculab.com**，或聯絡：

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